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Industrial Rehabilitation Part 2 - Interventions

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Learning Outcomes

After this course, participants will be able to:

- 1) List the stages and components of a Work Hardening Program
- 2) Recognize the various options available for Work Hardening, Work Conditioning and other like programs
- 3) Identify how work conditioning/hardening can improve return to work rates.

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Review:

- In our previous session we discussed the various components of Industrial Rehabilitation
 - Job Descriptions or Analysis- the most important part, everything revolves around this
 - Functional and/or Physical Capacity Evaluations
 - Various types-general to specific
 - Components of each one
 - Typically the “Initial Evaluation” for a Work program
 - Pre-Employment/Post Offer Testing

Today:

- Focus on the rehabilitation piece
 - Work Hardening/Work Conditioning

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History of Work Programs

- 1970-1980- Focus on the expense of work related injuries.
 - Expense in lost days and productivity
 - Expense in Workers Compensation costs
 - Medical expenses, Settlements
 - Replacement Workers
- During this time, there was also a shift in injury type
 - Move from traumatic to cumulative trauma
 - Small but significant numbers of employees were not returning to work
 - 5% of Low Back Pain clients in the 1980s accounted for 85% of the costs (Frymoyer, 1988)
 - Traditional Biomedical approaches were not working for these workers

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History of Work Programs

- This shift to chronic injury resulted in a nationwide boom in work hardening programs (Canada and Australia too).
- By 1990, there were over 500 established work hardening programs in the US.
- These programs are lucrative, relatively inexpensive to run, have low cancelation rates, and require less staff than traditional acute rehabilitation.
- This resulted in a concern that poorly run programs could tarnish the reputation of Work Programs.

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History of Work Programs

- The concern regarding quality of programs was a valid one.
 - 1990-early 2000, many programs fell out of favor
 - The chronic injuries did not go away
- In 1988, the Commission on Accreditation for Rehabilitation Facilities (CARF)-drafted standards for work hardening- Today, these are called Occupational Rehabilitation Programs
- In 2011- The Orthopedic Section of APTA developed guidelines for Work Rehabilitation
- In 2017-The AOTA updated their Fact Sheet on Work Rehabilitation

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Cost to Employers

- It is estimated that there are approximately 1 million work related injuries per year that result in lost time (and productivity) from work.
- It is estimated that over 45 billion dollars is spend annually on work related injuries and costs associated with workers compensation.
- The employer loses the employee and all training costs associated with that employee

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Let's Talk about What an Injury Does:

- What happens when a individual gets injured at work.
 - Often a time-delayed process
 - Time to referral, time delay after acute therapy
 - The longer the worker is off work, the less likely they are to return to that work
 - 6 weeks off work=up to a 40% chance of being off work in one year
 - 6 months off work=up to a 90% chance the worker will never return to work
 - General Deconditioning
 - Working is more than lifting
 - 6 weeks off work results in decreased endurance, stamina and strength

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What does an Injury Do:

- **Disability Mindset**
 - Focus on pain-"on a scale of 1-10"
 - Increased rate of depression
 - Increased rate of opioid use and abuse
 - Increased anxiety
 - "No one cares"-disdain for employer
 - Adversarial relationship
 - Learned helplessness
 - 2ndary gain issues
- **Other Impacts**
 - Decreased function
 - Decreased life expectancy
 - Increase in other medical issues/poorer health
 - Marginalized income

	Pre Injury	Post Injury
Any other Disorder	37.7%	99.1%
Clinical Depression	10.2%	48.5%
Opioid Dependence	1.6%	13.8%
Somatoform Disorder (pain disorder)	1.6%	96.4%

Enter Work Programs

- **Different from Traditional or Acute Rehabilitation**
 - Terminology-Worker vs. Patient
 - Function NOT medically based- we are not trying to "fix" the client
 - Focus- not on pain (NOT 0-10), focus on function
 - "How far did you walk your dog today?"
 - It is OK to return to work with pain.
 - Team approach-NOT rooted in just Biomedical (the Doctor may not even be considered a "team" member.)
 - Focus on the activity
 - Progression and grading of activity
 - Goal Oriented and Functional
 - Minimum of:
 - OT
 - PT
 - Psychologist
 - Vocational Specialist/Case Manager

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All or None:

- A good work program can't be done half way. It doesn't go in the corner or backroom. A well run program has been shown to facilitate return to work (as high as 80-88%), decrease depression, and the disability mindset.
- All Levels **MUST** embrace the concepts
- Level I - Acute Care-must be onboard!
 - Traditional interventions-modalities, AROM
 - Avoid Pain Talk- focus on function
 - Education about injury, ergonomics
 - Start transitional duties or partial work duties
- Level II-Work Conditioning or Work Hardening
 - Real work tasks
 - Goal Oriented and Functional
 - Realistic Time Lines
 - Not "if you go back to work, WHEN you go back to work"

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What is a *GOOD* program

- Programs are set up in a wide variety of ways, studies have consistently shown that a successful return rate is more likely if the program:
 - Is a **collaborative effort**-OT, PT, Nursing, Employer and EMPLOYEE
 - Common goals
 - Emphasis on **patient education**
 - Understanding condition-Carpal Tunnel Surgery can't fail
 - Focus is on **Functional, Goal Specific, Progressive Work Tasks**
 - ALL based on the Job Descriptions we talked about last time
 - Staying in **WORK mode**
 - Light duty, full programming, transitional work
 - Identify **Barriers to recovery** early and address
 - Develop **Individual Plans**

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Work Conditioning vs Work Hardening

- Work Condition- a post acute, work related, intensive, goal oriented treatment program designed to restore neuromuscular functions, range of motion, and cardiopulmonary functions. To restore physical abilities AND function to return the client to work.
 - Focus on FCE components-Walking, Squatting, lifting
- Work Hardening-a highly structured, goal-oriented, individualized program designed to return the client to work (with or without full physical abilities)
 - Focus on Work Duties- Typing a letter, delivering a package, changing oil in car

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Work Conditioning vs. Work Hardening

Work Conditioning	Work Hardening
Differences	
Can be a single discipline	Team approach- OT, PT, NS, may see other rehab professionals (pit falls)
Shorter time period-2-4 hours	4 or more hours per day
Three to five days a week	Three to five days a week (there are a few inpatient programs)
2-4 weeks	2-8 weeks
Focus on strengthening, conditioning, work simulation and functional activities	Focus is on a specific return to work goal-based on the Job Description
Goal is to return to "Normal"	Goal is to return to work
Similarities	
No longer Acute	
Flexibility and Cardio Conditioning	
Work Simulation, Actual Work	
Body Mechanics, Ergonomics, Work Modifications	
Specific Criteria-Including a desire to return to work	

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Work Conditioning Vs. Work Hardening



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Barriers and Issues

- Lack of Compliance
 - Late, no show- set the rules early (contracts)
 - Malingering- professionally challenge
 - Miss marked weights
 - Consistence testing
 - Peer Groups
 - Creative scheduling
 - Sometimes they just are-D/C
- Employer who is not willing to accommodate, do light duty or modify a job
 - Opportunity to educate
 - Prevent future injuries
- Physicians who won't listen
 - Hardest part, release clients to full duty prematurely
 - Random limits (no lifting over 10 pounds)

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Requirements to Enter a Work Program

- Medically stable
- Client must state and demonstrate a willingness to return to work
- There must be a physical or functional deficit that interferes with work
 - This is not a place to dump non compliant patients
 - Not all work injuries need a Work Program
- A functional evaluation (FCE) must be completed to identify functional limitations AND there must be an adequate Job Description

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What Does a Typical Program Look Like

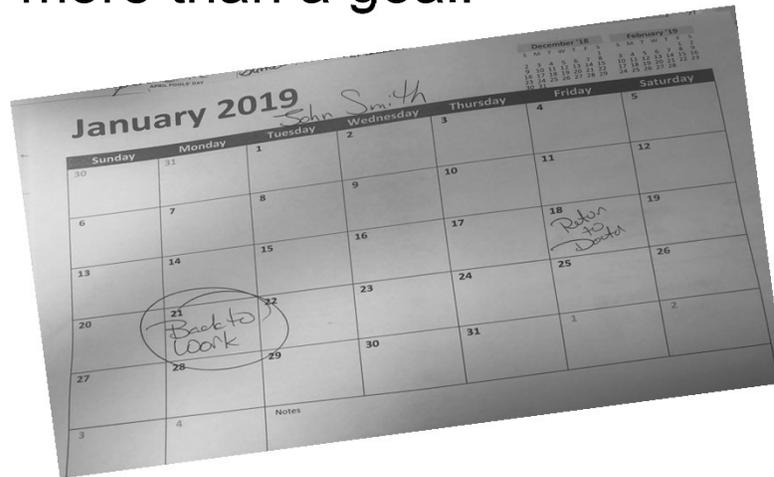
- Time Clock or Check in
- Daily task assignments
- General and specific Flexibility Program
- Education on Body Mechanics
- Specific Strengthening Program (this usually decreases as the functional component increases)
- Cardiovascular Conditioning at appropriate MET level.
- Functional Activities (Work Conditioning) or Graded Job Simulation (Work Hardening)-circuit training
 - Start at 25% of clients max or max required
 - Employer donated equipment when possible
- Pain/Stress Management as indicated (NO modalities)
 - What did you do to deal with pain before you got hurt
 - Sleeping, other activities, home tasks



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Return to work is happening, it is more than a goal!



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Goals	Week 1 _____	Week 2 _____	Week _____
1. Enter and Exit Panel Truck at 22', 25 x per day	Height _____ Reps _____	Height _____ Reps _____	Height _____ Reps _____
2. Lift 25# packages from head to waist level 100 x per day	Height _____ Wt _____ Reps _____	Height _____ Wt _____ Reps _____	Height _____ Wt _____ Reps _____
3. Lift 50# packages from chest to waist level 100 x per day	Height _____ Wt _____ Reps _____	Height _____ Wt _____ Reps _____	Height _____ Wt _____ Reps _____
4. Lift 50# packages from floor to waist level 100 x per day	Height _____ Wt _____ Reps _____	Height _____ Wt _____ Reps _____	Height _____ Wt _____ Reps _____
5. Carry 50# packages 30 yards 50 x per day on uneven terrain	Height _____ Wt _____ Distance _____ Reps _____	Height _____ Wt _____ Distance _____ Reps _____	Height _____ Wt _____ Distance _____ Reps _____
6. Carry 50# packages up 4 steps 20 x per day	Height _____ Wt _____ Steps _____ Reps _____	Height _____ Wt _____ Steps _____ Reps _____	Height _____ Wt _____ Steps _____ Reps _____
7. Load and roll a dolly with up to 200# 10 x per day	Height _____ Wt _____ Distance _____ Reps _____	Height _____ Wt _____ Distance _____ Reps _____	Height _____ Wt _____ Distance _____ Reps _____
8. Complete Cardio component at 6.0 METS	Activity _____ Time _____ Level _____	Activity _____ Time _____ Level _____	Activity _____ Time _____ Level _____

When to Discharge

- The client has met their work specific goals
- The client has not met all their goals (and may not) but the employer is willing to accommodate
- The client is not making progress toward the goals
 - You decide on the cut off: 3 days without progress, etc.
- The client is noncompliant or refuses intervention
- Medical Complications

BE Definitive in your recommendations and discharge. Not wishy washy

Mr. Smith participated in 5 weeks of Work Hardening at ABC Rehab following a torn rotator cuff and surgery in September of 2018. He completed the program on January 17, 2019 and has met all but one of the essential requirements required to complete his job as a package delivery specialist. Mr. Smith's only limitation is in overhead lifting and his employer (Mike Smith) has agreed to limit the size of packages stored overhead to meet his current performance level of 20#. See chart below for details. At this time Mr. Smith is safe and completes job tasks with ease. We are recommending return to work.

Discharge Status: John Smith January 17, 2019			
Goals	At entry	January 17, 2019	Notes
1. Enter and Exit Panel Truck at 22", 25 x per day	Max effort, limited to 4 x per day	Minimal effort, 25x per day	Goal Met
2. Lift 25# packages from head to waist level 100 x per day	Max of 10# 20x per day	20# lift 100 x per day	Goal Partially met, employer is willing to only load packages of 20# or less overhead
3. Lift 50# packages from chest to waist level 100 x per day	Max of 15# 10 x per day	50# lift 100x per day	Goal Met
4. Lift 50# packages from floor to waist level 100 x per day	Max of 15# 10x per day	50# lift 100x per day	Goal met
5. Carry 50# packages 30 yards 50 x per day on uneven terrane	Max of 15# 20 yards 20 x per day	50# carry 30 yards 50 x per day	Goal met
6. Carry 50# packages up 4 steps 20 x per day	Max of 15# 4 steps 20 X per day	50# lift 4 steps 20 x per day	Goal met
7. Load and roll a dolly with up to 200# 10 x per day-50 yards flat	Max of 100# 10x per day 50 yards	Max of 200# 10x per day 50 yards	Goal met
8. Complete Cardio component at 6.0 METS	Functioning at 5.3 METS	Functioning at 6.2 METS	Goal met

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Billing \$\$\$\$\$\$

- Can follow your states fee schedule and bill under Industrial Rehabilitation
 - **CPT Codes:**
 - OT Eval. Codes (or PT)-Complex 97167 would be typical
 - Other: 97750 if you did MET testing or Functional Testing on subsequent day (can't use the same day as eval. code)
 - Intervention Codes
 - 97545-work hardening first 2 hours
 - 97546 each additional hour
 - Other Options: Therapeutic Activity-97530 and/or 97110 Therapeutic Procedure
 - **Other options:**
 - Contracts or agreements with employers or case manager/insurance groups

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Questions

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